

MIS 5208 – Data Analytics for IT Auditors and Cybersecurity

Lecture 02: The Nature of Fraud

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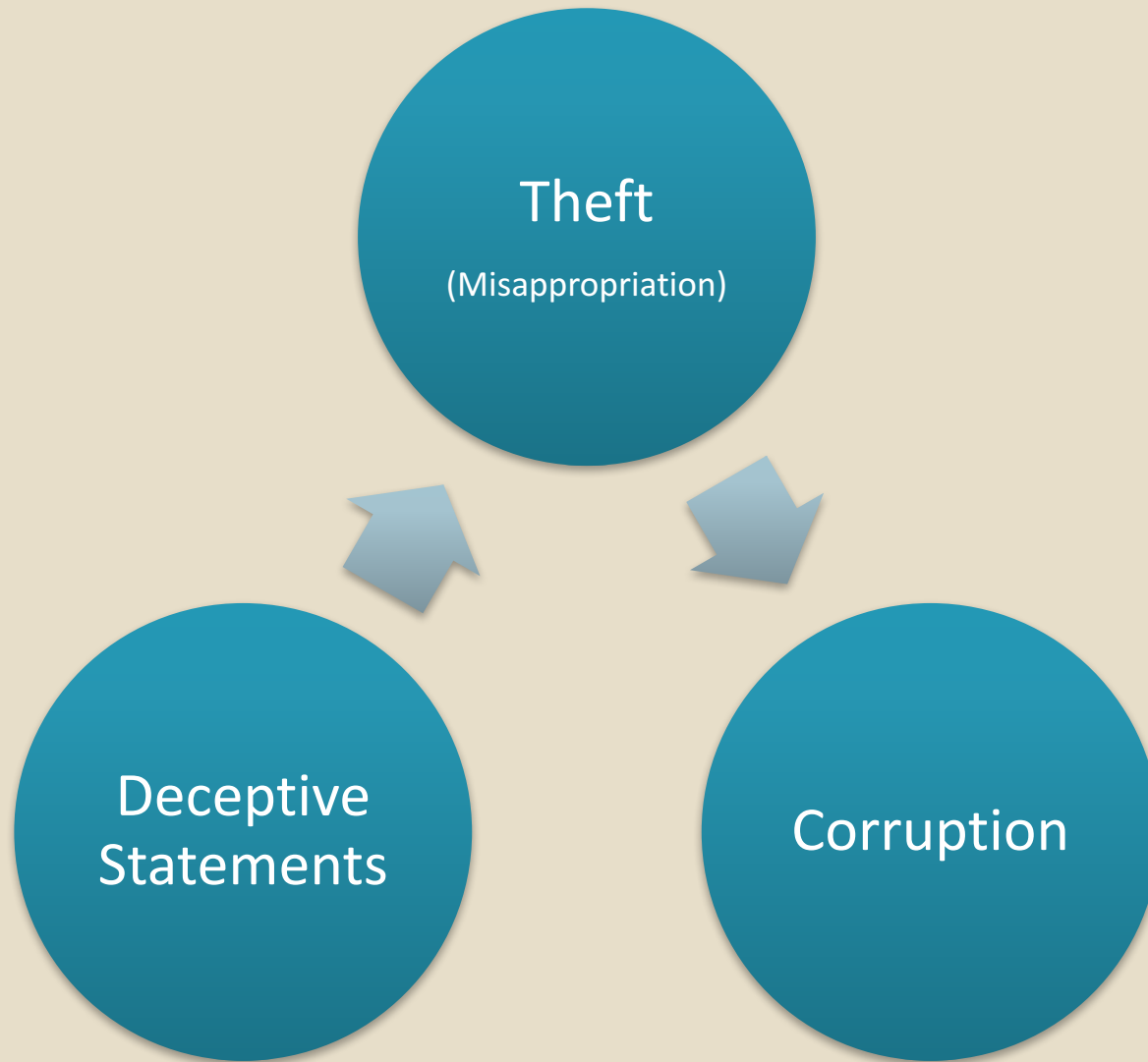
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Learning Outcomes

- Fraud is a serious issue
- What is fraud?
- Different types of fraud
- Understand fraud against and on behalf of an organization
- Criminal and civil fraud
- Fraud fighting careers

The Many Faces of Fraud

Fraud



Fraud

The intent to deceive to obtain an unearned benefit.

Fraud:

- Is an illegal act or acts (intentional wrongdoing that violates a law or laws)
- Includes the concealment of the act or acts
- Results in the perpetrators gaining financial benefit from the act (monetizing the gains - cash or another valuable commodity)

Examples:

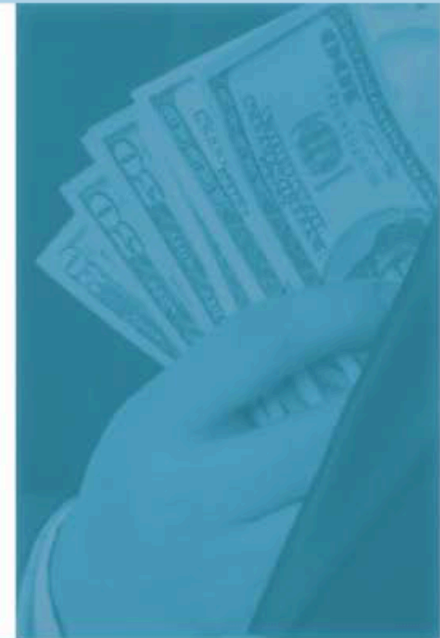
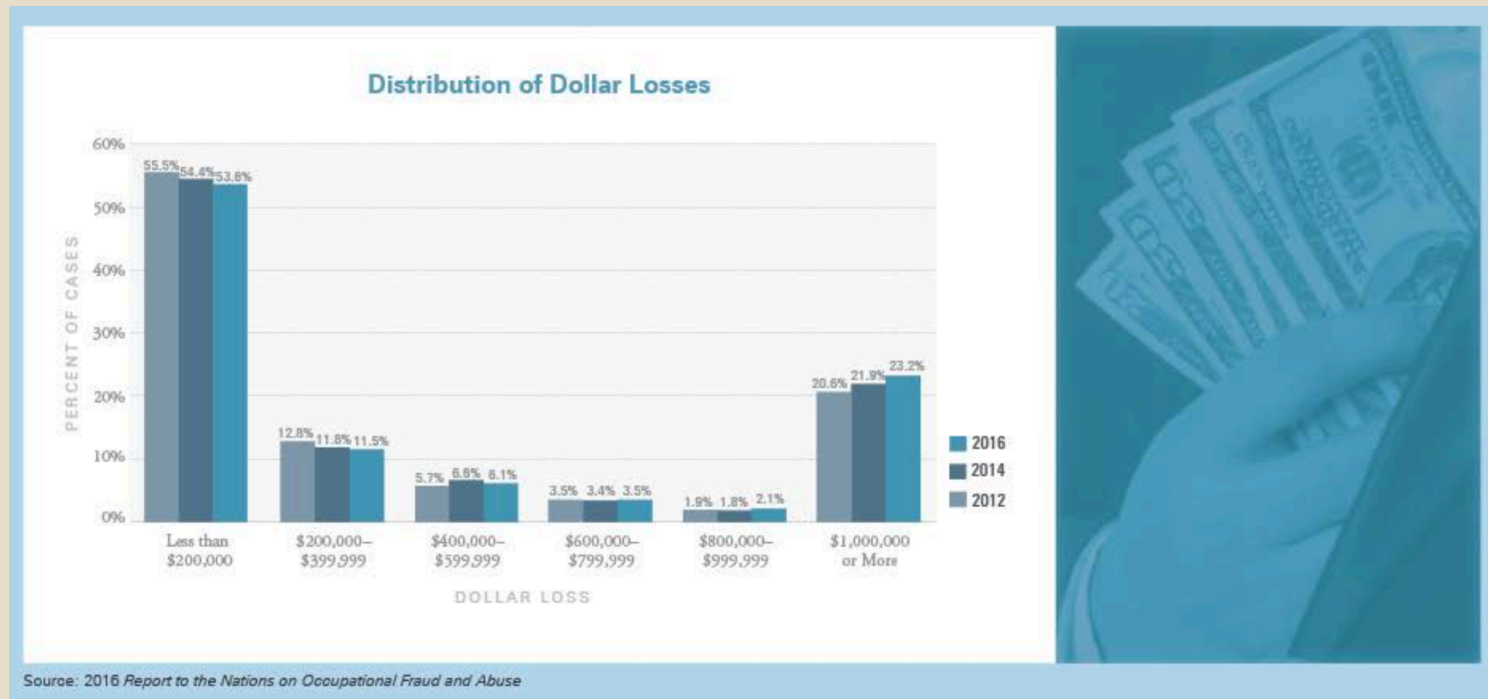
- Borrowing money using someone else's identity
- Misrepresent the profitability of a publicly traded company to artificially inflate the company's stock price
- Misrepresent the profitability of a privately held company, when selling the company, to make the buyer believe the company is worth more than it actually is
- Plant small quantities of valuable ore on land for sale to deceive potential buyers about the value of the land
- Using a stolen credit card to purchase goods and or services
- Often seen in conjunction with money laundering to hide the proceeds of the fraud

Fraud Other Examples

Fraud that benefits An Organization	Fraud that harms an organization
Improper transfer pricing between related entities	Stealing money, property or falsifying financial records to cover up a theft
Intentional improper related-party transactions where one party receives some benefit not obtainable in a normal arm's length transaction.	Intentionally misrepresenting or concealing events or data
Legally transferring (assignment) fictitious or misrepresented assets or sales	Submitting claims for services or goods not actually provided by the organization.
Deliberate misrepresenting or valuing assets, liabilities or sales in a financial transaction	
Conducting business activities that violate government statutes, rules, regulations, or contracts	
Misrepresenting the financial status of an organization to outside parties by intentionally failing to disclose significant information.	

Association of Certified Fraud Examiners

- The world's largest anti-fraud organization and premier provider of anti-fraud training and education.



Revenues the typical organization loses to fraud each year

5%

Our study analyzes

1,483 cases

that caused in excess of

\$3 billion

in losses due to fraud





22%

of occupational fraud cases
cause losses of more than
\$1 million

POSITION

The majority of occupational frauds were committed by staff at the employee or managerial level.



EMPLOYEE



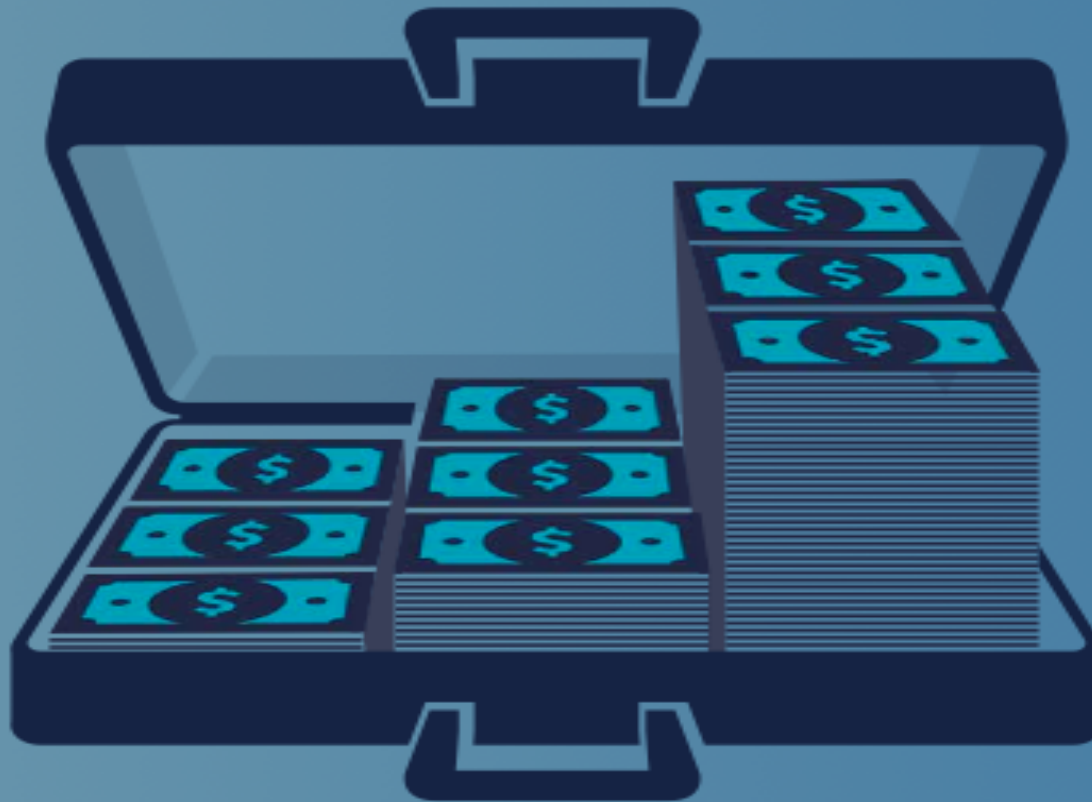
MANAGER



OWNER/EXECUTIVE

MEDIAN LOSS BY POSITION

The higher the fraudster's level of authority, the greater losses tended to be.



\$75,000
EMPLOYEE

\$130,000
MANAGER

\$500,000
OWNER/EXECUTIVE

MEDIAN LOSS BY POSITION

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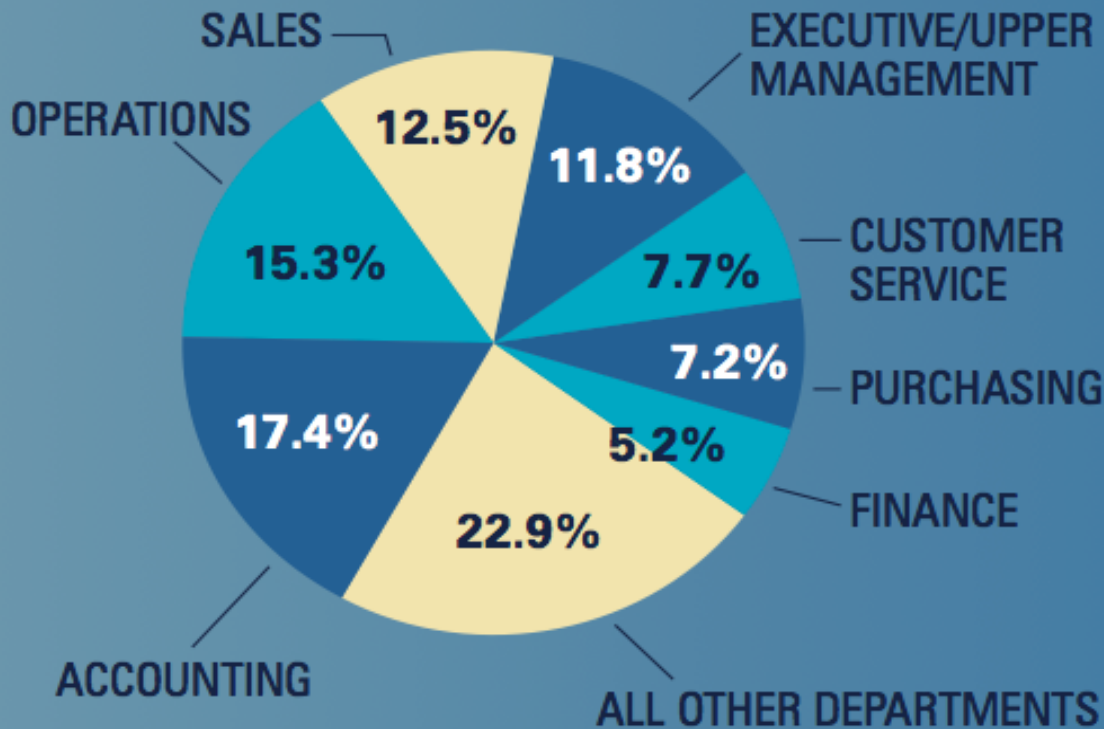
\$75,000
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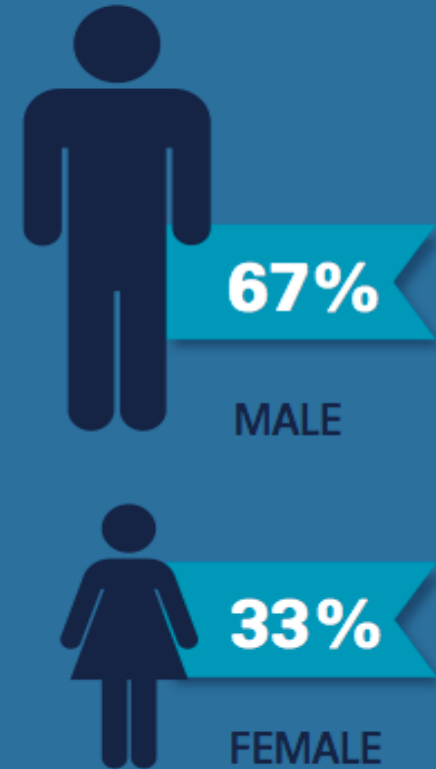
DEPARTMENT

77% of all occupational frauds originated in one of seven organizational departments: accounting, operations, sales, executive/upper management, customer service, purchasing and finance.



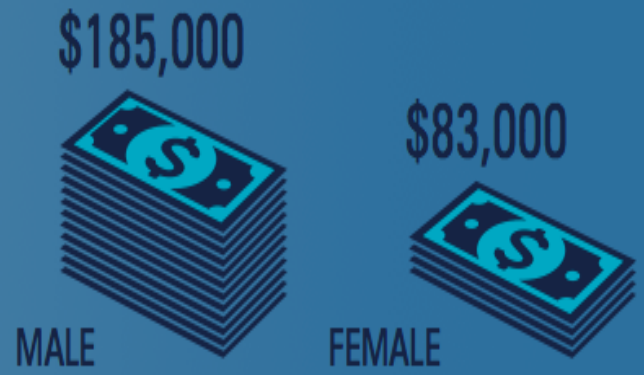
GENDER

Male fraudsters outnumbered females two to one.



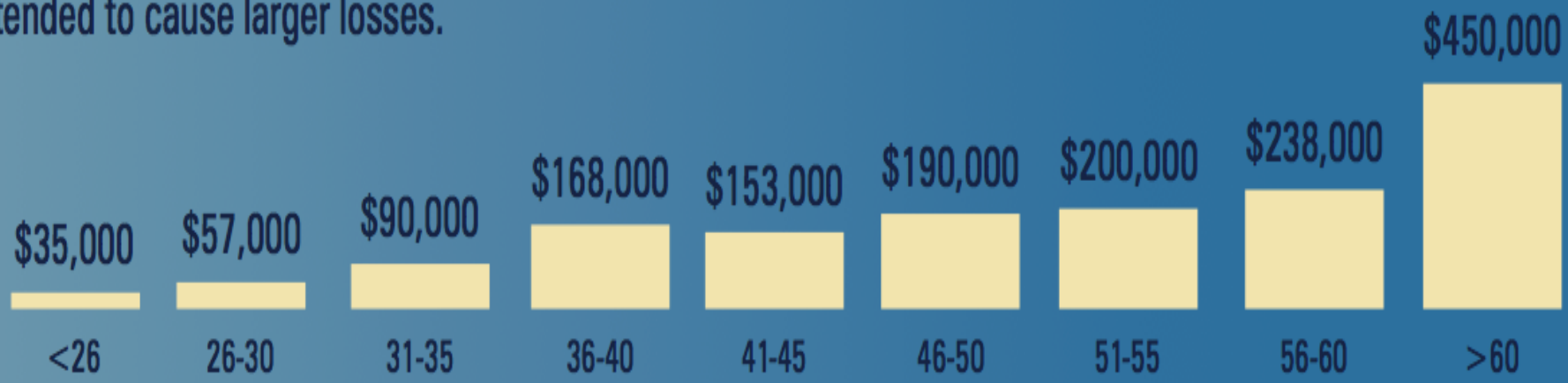
MEDIAN LOSS BY GENDER

Losses attributed to males were **123%** higher than losses caused by females.



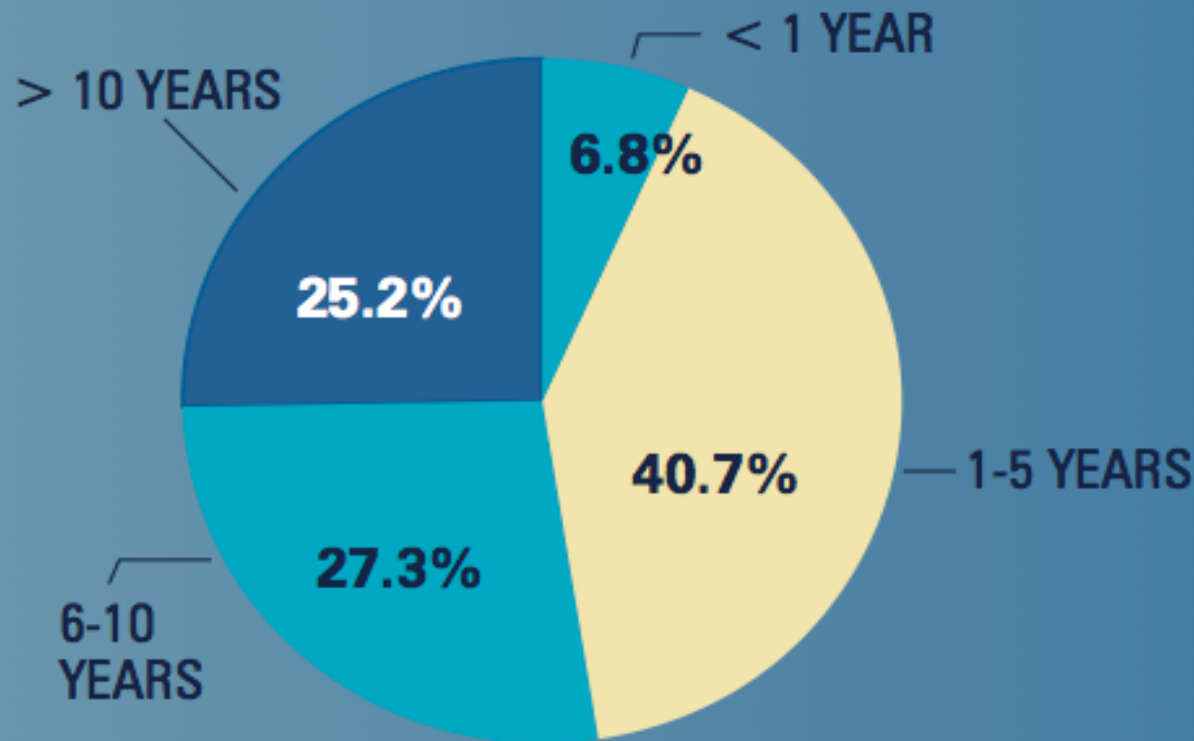
AGE

52% of fraudsters were between 31 and 45 years old, but older fraudsters tended to cause larger losses.



TENURE

7% of perpetrators committed fraud during their first year on the job. **53%** had been with their organizations for more than five years.



The Movies

Introduction to Fraud

On December 11, 2008, the Federal Bureau of Investigation (FBI) arrested Bernard “Bernie” Madoff for perpetrating the single largest investment fraud in the history of the world. A day earlier, Madoff’s own sons had turned him in, reporting to authorities that Madoff’s wealth management business was not a legitimate business but was a shell company for a large scam. On March 12, 2009, Madoff pled guilty to 11 federal crimes and admitted to operating the largest Ponzi scheme in history. On June 29, 2009, he was sentenced to 150 years in prison and ordered to make restitution payments of \$17 billion.

Source: © 2016 Cengage Learning. All Rights Reserved.

The Wizard of Lies

“There are no investments,” he says with chilling simplicity. “I made them up. I took some money from some people and gave it other people. There’s nothing left.”



Source: Rorke, R. (2017). HBO's Madoff movie is a powerful character study. *New York Post*. Retrieved from <https://nypost.com/2017/05/19/hbos-madoff-movie-is-a-powerful-character-study/>

Fraud, Greed, Deception and Confidence

Ponzi Schemes

PONZI SCHEMES

IF IT'S TOO GOOD TO BE TRUE





Image: Wikipedia


The schemes are named after Charles Ponzi, who duped thousands of Americans into investing in a postage stamp scheme in the 1920s.

What is a Ponzi Scheme?


IT USUALLY IS




An investment scheme that lures new investors by offering unusually high payouts.



Older investors get payouts from new investors, rather than from profits earned.



The scheme collapses and everyone loses their money when it becomes difficult to lure new investors, a number of investors cash out or the promoter runs off with the money.



Investors receive payouts and encourage other investors to invest or invest more themselves.

HOW TO SPOT A SCHEME


Compare the scheme's interest rate to the country's official rate (Repo Rate).

5% - 6%
Average interest rate in a country

VS

30%
Unusually high rate

Don't be comforted if the scheme has paid out regularly to family and friends.



"My husband did not want to invest initially, because he was very conservative. The monthly statements showed very impressive growth. This convinced us to use some of our other investments to live off." *Ponzi victim*

WHAT TO ASK BEFORE INVESTING

How long have you been in the investment business?
What are your qualifications?

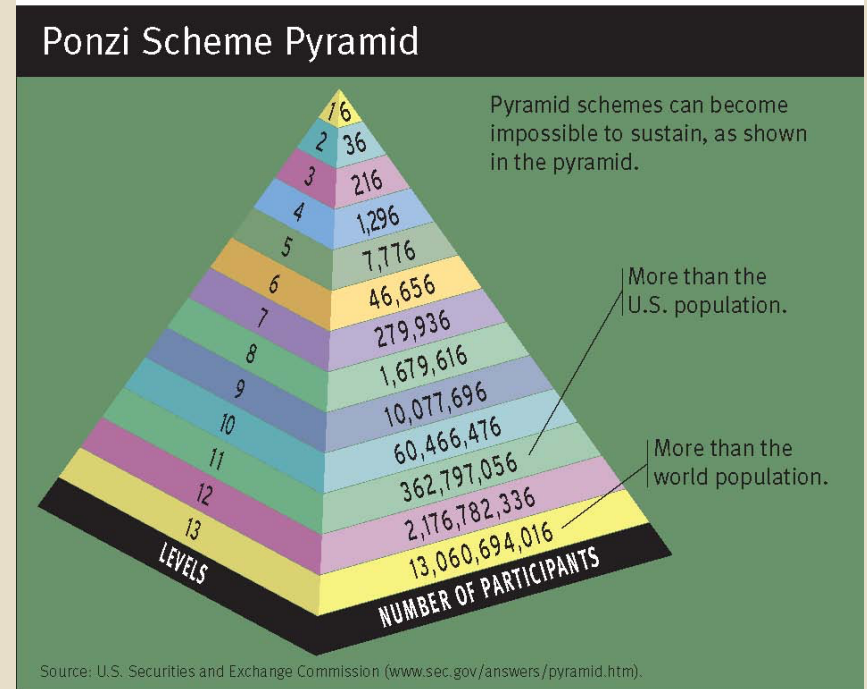
Do they require me to introduce other investors?

"We heard about it from friends, they all invested and received great returns. All our friends and family were invested and now have nothing to live off." *Ponzi victim*

FSB Are you registered with the Financial Services Board?
Can you show me proof?

! Trust your instincts!

References: Wikipedia, Dawie de Villiers - CEO, Sanlam Structured Solutions Design: Lilian van Zyl



Source: <http://thelabeconomics.blogspot.com/2013/01/our-whole-economy-is-ponzi-scheme.html>

Source: <http://www.investologic.in/wp-content/uploads/2014/03/Ponzi-Schemes.jpg>

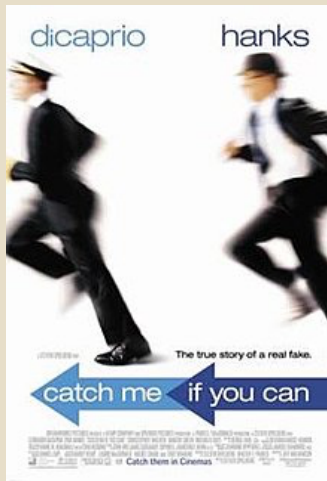
Types of Fraud

Against an Organization or Individual

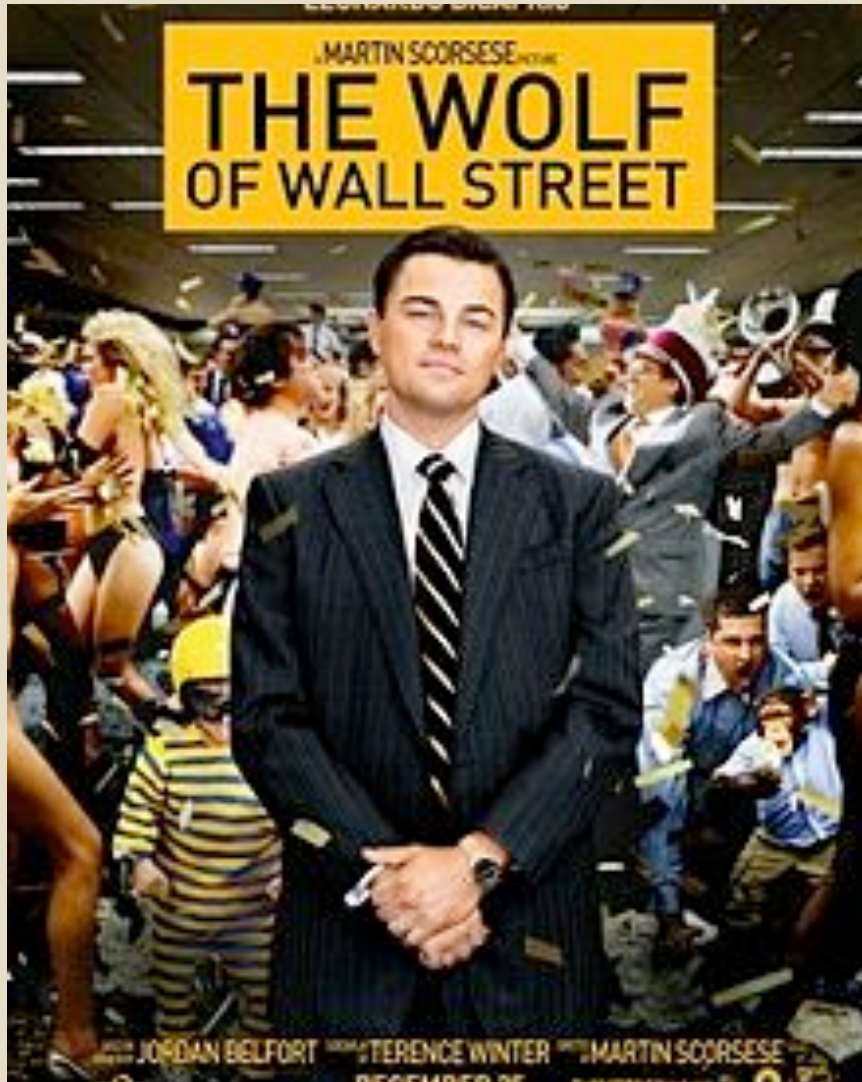
Victim	The target organization
Perpetrator	Employee or outsider who "cons" employees

On Behalf of an Organization

Victim(s)	Shareholders
Perpetrators	Corporate officers



Securities Fraud



- Penny stock fraud
- Stock price rises due to broker buying the stock artificially inflating the price
- Using false reporting and manipulative business activities
- <http://www.fbi.gov/cleveland/press-releases/2014/penny-stock-fraud-nets-millions>
- <http://www.wsj.com/articles/sec-charges-two-with-penny-stock-fraud-1405716923>

Fraud Classification

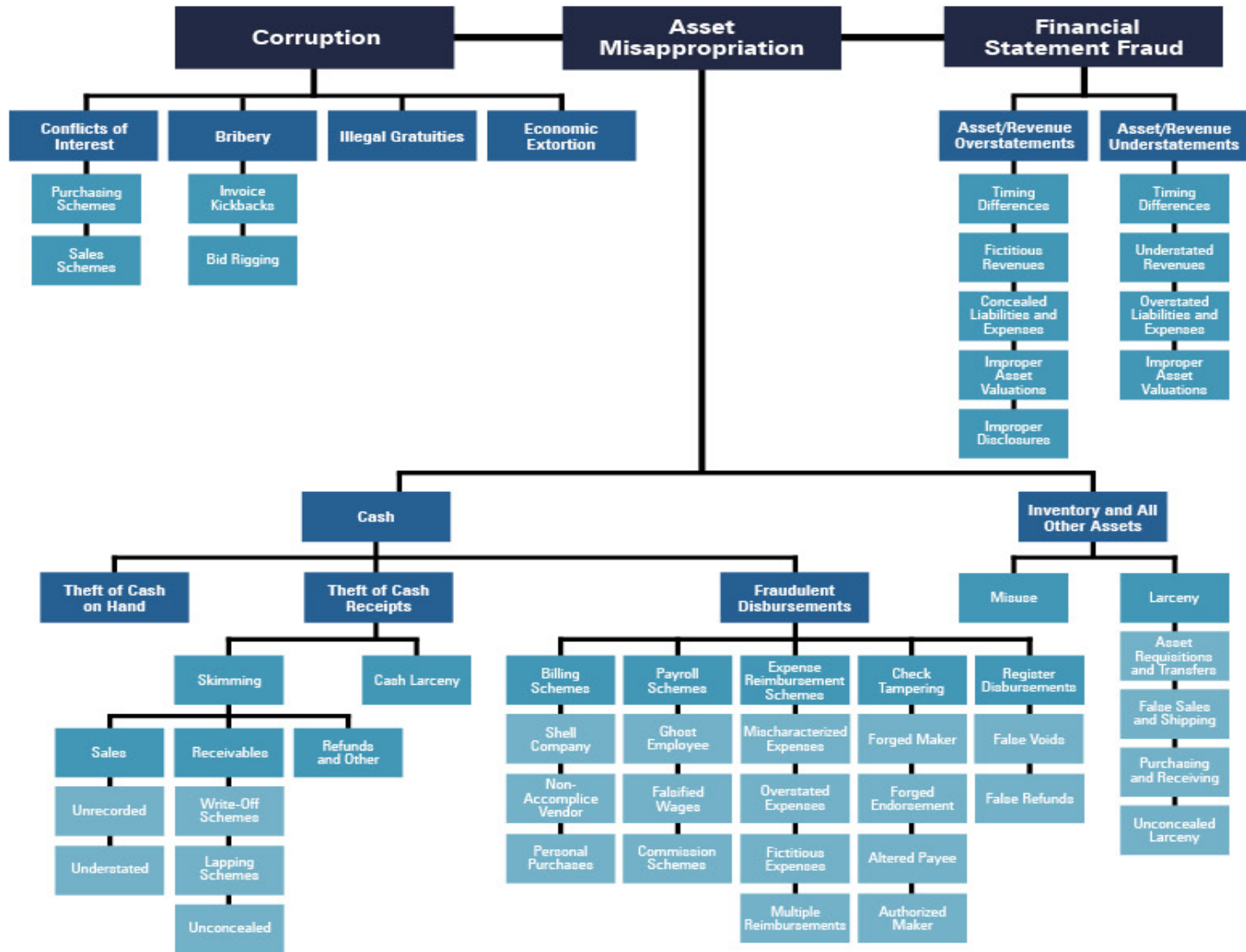
Occupational Fraud - AFCE	Description
Asset misappropriation	Misuse of an organization's assets
Corruption	Influence wrongfully used to change the outcome of a business transaction for the benefit of the perpetrator
Fraudulent financial statements	Adulteration of financial statements to hide or overstate financial performance – fraudulently influencing investor interest.

Victim	Perpetrator
Company or Organization	Employee embezzlement – employee is the perpetrator Vendor fraud – vendor is the perpetrator Customer fraud – customer is the perpetrator
Shareholders, debt-holders of the organization	Management
Investor (Stock, Bond, Real Estate)	Dishonest brokerages, individuals
Miscellaneous	Probably too many to name, counterfeit Rolex watches, Poke Mon cards, etc.

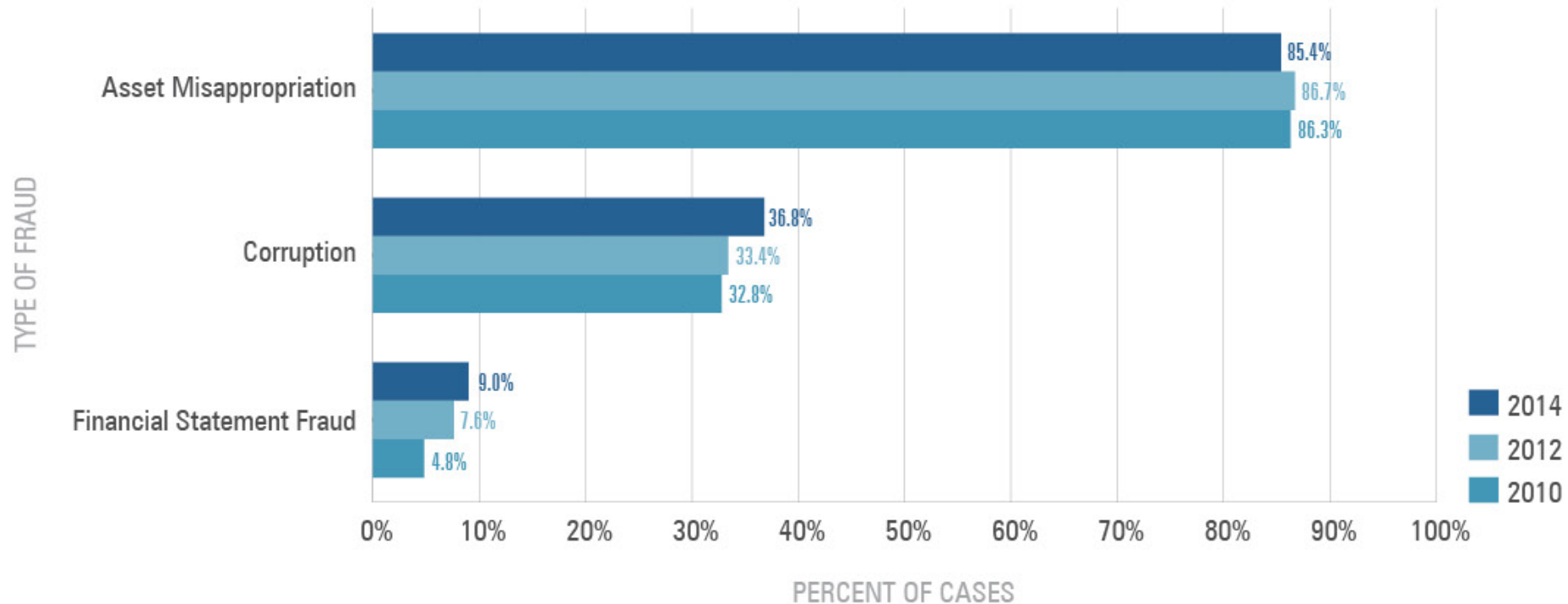
Types of Fraud

Type of Fraud	Perpetrator	Victim	Explanation
Employee embezzlement	Employees	Employer	Employees use their positions to take or divert assets belonging to their employer. This is the most common type of fraud.
Vendor fraud	Vendors	The organization to which the vendors sell goods or services	Vendors either overbill or provide lower quality or fewer goods than agreed.
Customer fraud	Customer	The organization which sells to the customers	Customers don't pay, pay too little, or get too much from the organization through deception.
Management fraud (Financial statement fraud)	Management	Shareholders and/or debt-holders and regulators (taxing authorities, etc.)	Management manipulates the financial statements to make the company look better than it is. This is the most expensive type of fraud.
Investment scams and other consumer frauds	Fraud perpetrators (all)	Investors	These types of frauds are committed on the Internet and in person and obtain the confidence of individuals to get them to invest money in worthless schemes
Other (Miscellaneous) types of fraud	Fraud perpetrators (all)	All kinds—depends on the situation	Anytime anyone takes advantage of the confidence of another person to deceive him or her.

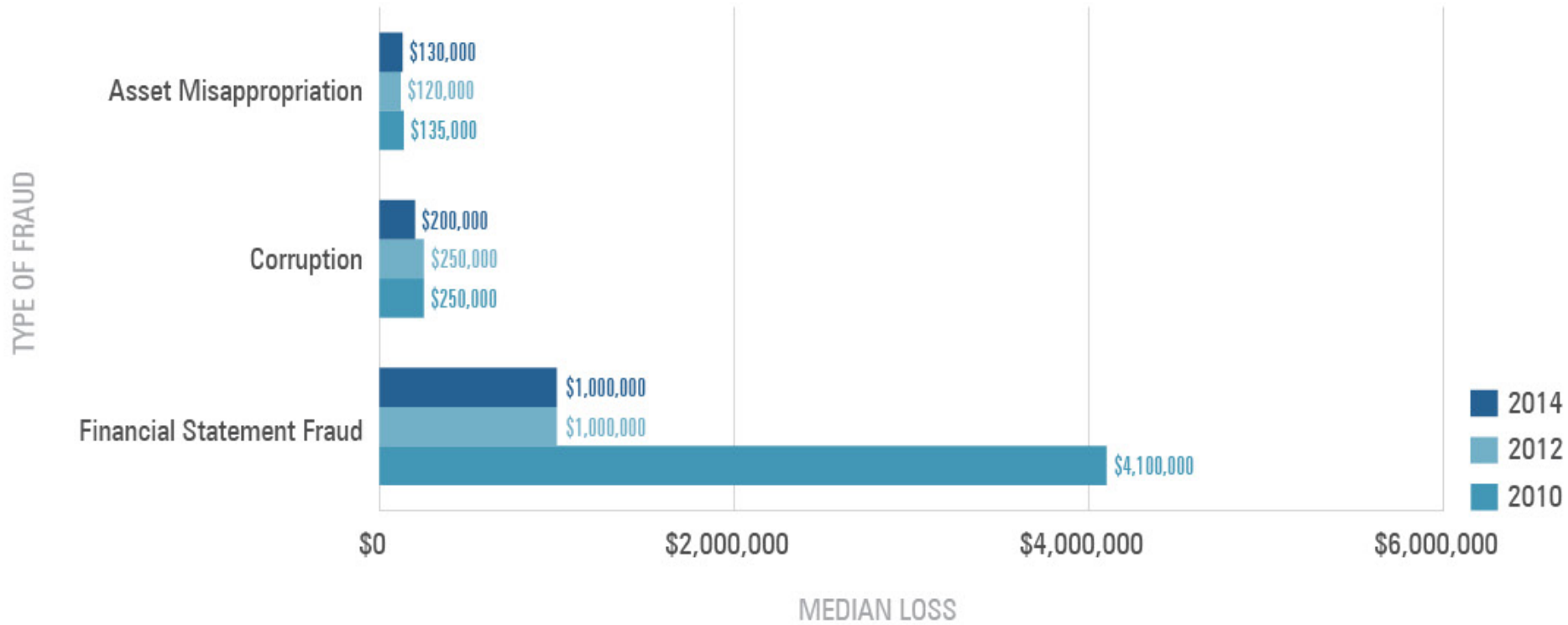
How Occupational Fraud is Committed



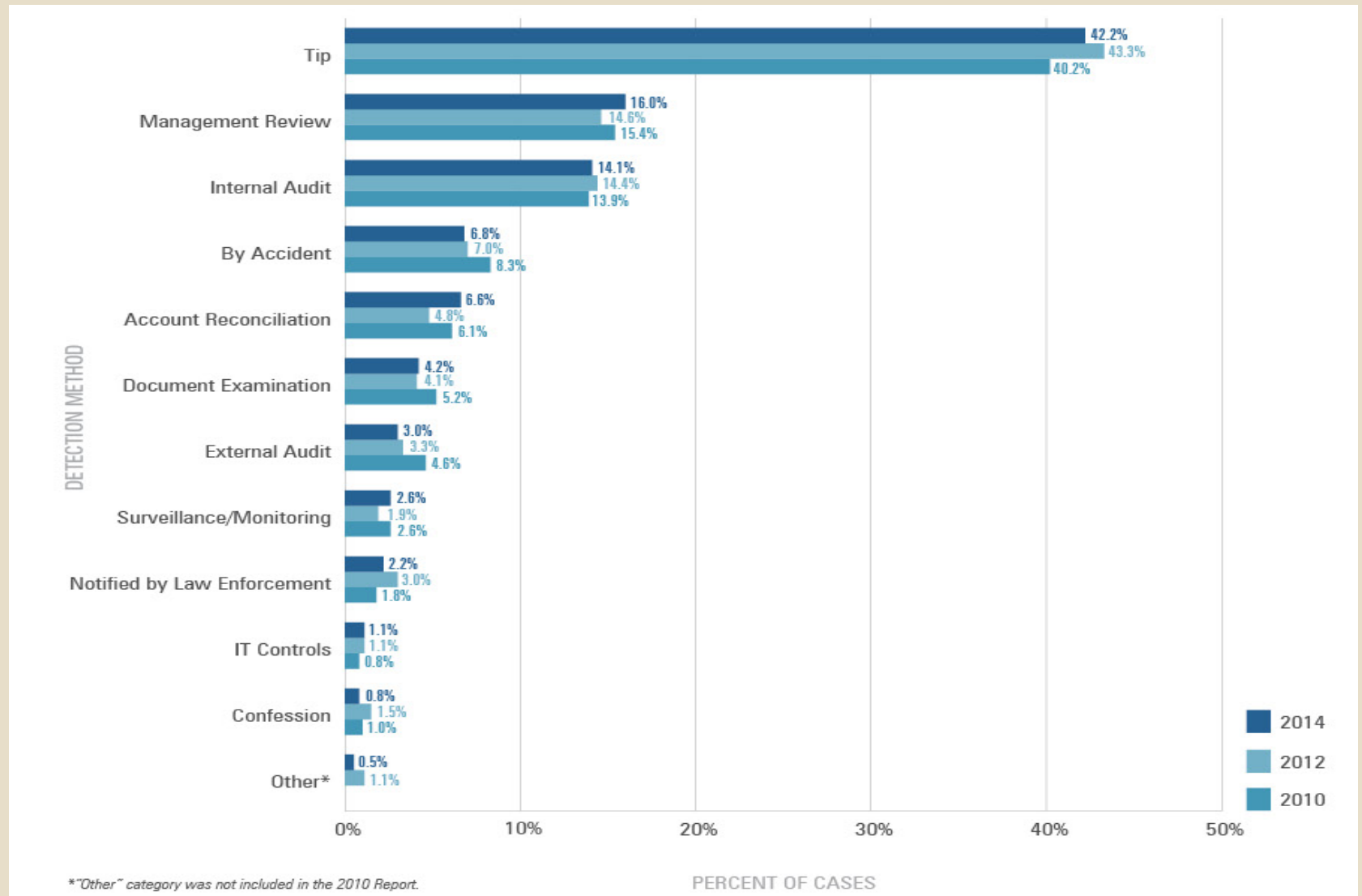
Occupational Fraud – Percentage of Cases



Occupational Fraud – Median Loss



Occupational Fraud – Initial Detection



Employee Embezzlement

- Occupational fraud (most common)
- Employees steal company assets
- Is direct or indirect
 - Direct: employee directly steals company cash, inventory, tools, supplies, or other assets
 - Indirect: employee takes bribes or kickbacks from vendors, customers, or others for lower sales prices, higher purchase prices, nondelivery of goods, or the delivery of inferior goods
- Example: CVC Construction (direct)

Vendor Fraud

- Two main varieties:
 - through vendors alone
 - through collusion between buyers and vendors
- Usually results in:
 - overcharge for purchased goods
 - shipment of inferior goods
 - Nonshipment of purchased goods
- Example: Halliburton

Customer Fraud

- When customers
 - do not pay for goods
 - pay too little
 - get something for nothing
 - deceive organizations into giving them something they should not have
- Example: Chicago Bank
 - \$525K Cashier's Check
 - \$70M to Swiss Bank Accounts

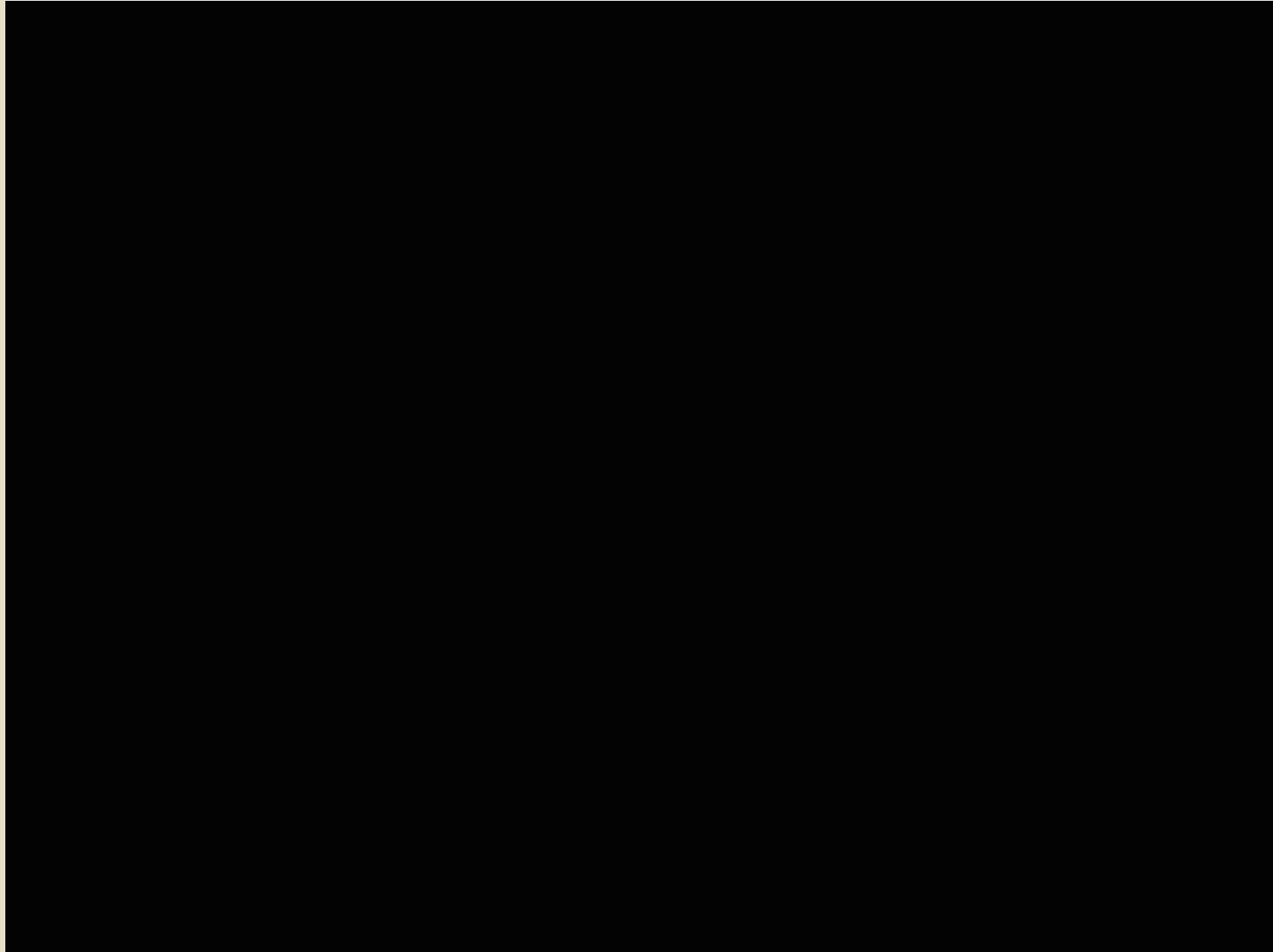
Management Fraud

- Financial statement fraud
 - Top management deceptively misstates financial statements
 - Examples:
 - Enron
 - WorldCom
 - Sunbeam

Investment and Consumer Fraud

- Worthless investments sold to investors
- Examples:
 - Ponzi schemes
 - Telemarketing fraud
 - Nigerian letter or money scams (419)
 - Identity theft
 - Advance fee scams
 - Redemption/strawman/bond fraud
 - Letter of credit fraud
 - Internet fraud

Fraud's Impact



United States Fraud Statutes

Statute	Title & Code	Description
Bribery of Public Officials and Witnesses	Title 18, US Code §201	Bribery is punishable by up to fifteen years in prison, three times of the value given or received, and disqualification of the officer involved.
Anti-kickback Act of 1986	Title 41, US Code §51 to 58	The giving or receiving anything of value by a subcontractor, to a prime contractor in US government contracts is illegal. Violations are punishable by a fine and up to 10 years in prison.
Mail Fraud	Title 18, US Code §1341	The use of the mail system to defraud another individual or organization is illegal. Violations are punishable by both fines and imprisonment.
Bank Fraud	Title 18, US Code §1344	Protects banks from fraud by customers, officers, employees, and owners of a bank, credit union and other organizations insured by a US federal agency.
Racketeer Influenced and Corrupt Organizations (RICO) Statute	Title 18, US Code §1961	Prohibits “racketeering activity” – two or more enumerated criminal violations that cross state lines.
Computer Fraud	Title 18, US Code §1030	Punishes the intentional unauthorized use to a “protected computer” for the purpose of obtaining restricted data pertaining to national security, confidential financial information, committing fraud, damaging, or destroying information contained in the computer.
Securities Fraud	Rule10(b)5 Securities Act of 1934, §17(a)	The use of material inside information to influence the purchase or sale of company securities either directly or through an exchange is illegal.
Foreign Corrupt Practices Act (FCPA)	Title 15, US Code §78m, 78a(b), 78dd-1, 78dd-2, 78ff	It is illegal to bribe foreign officials
Tax Evasion	Title 26, US Code §7201	

Chinese Fraud Statutes

- China has two sets of laws related to bribery:
 - One set of laws deals with payments given to state officials, and a different set applies to commercial bribery between private persons. Laws that criminalize official corruption, defined as payments to state officials, include Articles 389–95 of the PRC Criminal Law.
 - A separate set of laws deals with commercial bribery. Commercial bribery is prohibited by Article 8 of the Anti-Unfair Competition Law (AUCL) and by Article 163 of the PRC Criminal Law.

- PRC CRIMINAL LAW, *supra* note 18, at arts. 389–95 (amended 1997). Article 389 provides:
 - Anyone, who violates the state regulations by offering money or property to a state functionary while engaging in a business transaction, where the amount involved is relatively large, or violates the state regulations by offering any kickbacks or transaction fees to a state functionary while engaging in a business transaction, shall be treated as having committed the crime of bribery.

Source: Chow, D. (2012). The Interplay Between China's Anti-Bribery Laws and the Foreign Corrupt Practices Act. *Ohio State Law Journal*, 73:5.

Criminal and Civil Fraud Laws

	CRIMINAL CASE	CIVIL CASE
Purpose	To right a wrong	To obtain a remedy
Consequences	Jail and/or fines	Restitution and damage payments
Burden of Proof	"Beyond a reasonable doubt"	"Preponderance of evidence"
Jury	Jury must have 12 people	May consist of fewer than 12 persons
Initiation	Determination by a grand jury that sufficient evidence exists to indict	Filing of a claim by a plaintiff
Verdict	Unanimous verdict	Parties may stipulate to a less than unanimous verdict
Claims	Only one claim at a time	Various claims may be joined in one action

Civil Law

- The civil law system is derived from the Roman Corpus Juris Civilis of Emperor Justinian I; it differs from a common-law system, which relies on prior decisions to determine the outcome of a lawsuit. Most European and South American countries have a civil law system. England and most of the countries it dominated or colonized, including Canada and the United States, have a common-law system. However, within these countries, Louisiana, Quebec, and Puerto Rico exhibit the influence of French and Spanish settlers in their use of civil law systems.
- In the United States, the term civil law has two meanings. One meaning of civil law refers to a legal system prevalent in Europe that is based on written codes. Civil law in this sense is contrasted with the common-law system used in England and most of the United States, which relies on prior case law to resolve disputes rather than written codes. The second meaning of civil law refers to the body of laws governing disputes between individuals, as opposed to those governing offenses that are public and relate to the government—that is, civil law as opposed to Criminal Law.

Source: <https://legal-dictionary.thefreedictionary.com/civil+law>

US Criminal vs. Civil

	Criminal	Civil
Purpose	To Right a Wrong	To obtain a remedy
Consequences	Jail and or fines	Restitution and damage payments
Burden of Proof	Beyond a reasonable doubt	Preponderance of evidence
Jury	Jury must have 12 people	May consist of fewer than 12 persons
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Careers

Fraud Investigation Careers

Skills

- **Analytical Skills**
 - Examine data for symptoms of fraud
- **Communication Skills**
 - Effectively interview witnesses and suspects
 - Communicate findings to witnesses, courts and others
- **Technological Skills**
 - Search for fraud by effectively using information systems
- **Accounting and Business Skills**
- **Legal Skills**
 - Civil and criminal law
 - Criminology
 - Privacy issues
 - Employee rights
 - Fraud statutes
 - Other legal fraud-related issues
- **Language and cultural skills**
 - The ability to speak and write in a foreign language
 - A knowledge of human behavior

Become a Certified Fraud Examiner

- Be an associate member of the ACFE in good standing
- Meet minimum academic and professional requirements:
 - Bachelor's Degree
 - Two years of professional experience directly or indirectly related to fraud examination
- Be of high moral character
- Pass the CFE Examination
- Agree to abide by the Bylaws and Code of Professional Ethics of the ACFE

US Fraud-fighting Careers

TYPES OF EMPLOYERS	TYPE OF CAREER
Government and law enforcement	FBI, postal inspectors, Criminal Investigation Division of the IRS, U.S. marshals, inspector generals of various governmental agencies, state investigators, and local law enforcement officials.
CPA firms	Conduct investigations, support firms in litigation, do bankruptcy-related accounting work, and provide internal audit and internal control consulting work.
Corporations	Prevent, detect, and investigate fraud within a company. Includes internal auditors, corporate security officers, and in-house legal counsels.
Consulting	Serve as an independent consultant in litigation fraud work, serve as expert witness, consult in fraud prevention and detection, and provide other fee-based work.
Law firms	Lawyers provide litigation and defense work for companies and individuals being sued for fraud and provide special investigation services when fraud is suspected.

Next Lecture: Why People Commit Fraud